

CLAIM SUMMARY DOCUMENT:

Claims 1-17 (Canceled)

sub B1 } Claim 18 (Original) A method of manufacturing a fluid vaporizing device comprising the steps of: (a) providing a fluid passage in a body, the fluid passage having an inlet opening and an outlet opening; and, (b) forming a tubular heater by depositing a thin resistive film inside said fluid passage such that the film lines all or part of the length of the passage; the heater being operable to volatilize fluid in the passage by passing an electrical current through the film.

Claim 19 (Original) The method of Claim 18, wherein the depositing step comprises introducing a metal in solution, suspension, or dispersion in the flow passage and depositing metal on the interior of the passage.

Claim 20 (Original) The method of Claim 18, wherein the depositing step comprises introducing a solution containing a platinum salt into the fluid passage, depositing platinum and heating the deposited platinum.

Claim 21 (Original) The method of Claim 18, further comprising the step of forming conductive contacts electrically connecting the exterior of the body to the interior of the passage; the contacts being operable to supply an electrical current to the heater and

wherein the contacts may be formed before, after, or concurrently with the formation of the heater.

Claim 22 (Canceled)

a1
Claim 23 (Original) The method of Claim 18, wherein the depositing step comprises: (a) coating the interior of the passage with a layer of metal powder, salt, or oxide in solution, suspension, or dispersion; and, (b) heating the layer to a temperature sufficient to convert the layer to a thin metal film.

Claim 24 (Original) The method of Claim 18, wherein the depositing step comprises: (a) coating the interior of the passage with a metal salt solution; and, (b) heating the passage to a temperature sufficient to reduce the deposited material to a thin metal film.

Claim 25 (Original) A fluid vaporizing device made by the method of Claim 18.

Claim 26 (New) A method of manufacturing a fluid vaporizing device comprising the steps of: (a) providing a fluid passage in a body, the fluid passage having an inlet opening and an outlet opening; and, (b) forming a tubular heater by depositing a thin resistive film inside said fluid passage such that the film lines all or part of the length of the passage; the heater being operable to volatilize fluid in the passage by passing an electrical current

a1
through the film; wherein the depositing step comprises a process chosen from the group consisting of: thermally decomposing a metal salt deposited in the passage in solution to a thin resistive metal film; heating a metal powder deposited in the passage in suspension or emulsion; reduction of a metal oxide deposited within the passage in a suspension or emulsion; coating the passage with resistive ink; electrolessly depositing of one or more layers of metal; and, vapor depositing a metal by electrically heating a wire threaded through the passage.

Claim 27 (New) The method of Claim 26, wherein the depositing step comprises introducing a metal in solution, suspension, or dispersion in the flow passage thereby depositing metal on the interior of the passage.

Claim 28 (New) The method of Claim 26, wherein the depositing step comprises introducing a solution containing a platinum salt into the fluid passage, thereby depositing platinum lining all or a part of the length of the passage, and heating the deposited platinum.

Claim 29 (New) The method of Claim 26, further comprising the step of forming conductive contacts electrically connecting the exterior of the body to the interior of the passage; the contacts being operable to supply an electrical current to the heater and

wherein the contacts may be formed before, after, or concurrently with the formation of the heater.

Claim 30 (New) The method of Claim 26, wherein the depositing step comprises: (a) coating the interior of the passage with a layer of metal powder, salt, or oxide in solution, suspension, or dispersion; and, (b) heating the layer to a temperature sufficient to convert the layer to a thin metal film.

a
Claim 31 (New) The method of Claim 26, wherein the depositing step comprises: (a) depositing material by coating of the interior of the passage with a metal salt solution; and, (b) heating the passage to a temperature sufficient to reduce the deposited material to a thin metal film.

Claim 32 (New) A fluid vaporizing device made by the method of Claim 26.

Claim 33 (New) The fluid vaporizing device of Claim 25, wherein the heater comprises one or more of platinum, gold, nickel, silver, or tin in the form of a pure metal, alloy, mixture, or plural layers and/or the fluid passage is of capillary size.

Claim 34 (New) The fluid vaporizing device of Claim 25, wherein the fluid passage is located in a monolithic or multilayer body of an electrically insulating material and/or the

fluid passage has a uniform cross section along the length thereof, and a maximum width of the fluid passage is 0.01 to 10 mm.

Claim 35 (New) The fluid vaporizing device of Claim 25, wherein the heater comprises a deposited layer of platinum.

Q1
conced Claim 36 (New) The fluid vaporizing device of Claim 25, wherein the heater is a bio-compatible material that is arranged to be in direct contact with fluid in the passage.

Claim 37 (New) The fluid vaporizing device of Claim 25, wherein the step of providing the fluid passage in the body comprises, prior to forming a heater therein, assembling first and second layers of material enclosing a channel therebetween, or assembling a stack of first, second and third layers of material with the third layer comprising a void enclosed between the first and second layers to form the fluid passage.